6. On Kaup's Cassowary (Casuarius kaupi), and on the other known Species of the Genus. By P. L. Sclater, M.A., Ph.D., F.R.S., Secretary to the Society.

[Received January 23, 1872.]

## (Plate IX.)

In the 'Journal für Ornithologie' for 1861 (p. 44) Hr. v. Rosenberg described a new species of Cassowary, of which one of his hunters had obtained a specimen on the western coast of Salawatty—and proposed to call it Casuarius kaupi. H. v. Rosenberg particularly states that his example was an old male, and distinguishes it from Casuarius galeatus by the entire absence of any throat-wattles, besides other noticeable differences.

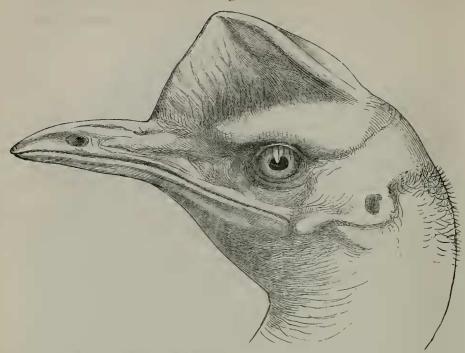
In 1866 I communicated to this Society an extract from a letter received from our Foreign Member Dr. Schlegel, stating that Bernstein had lately collected, for the Leyden Museum, on Salawatty and the adjoining coast of New Guinea seven specimens of a Cassowary, which turned out to be Casuarius uniappendiculatus—and that Prof. Schlegel had come to the conclusion that the so-called Casuarius kaupi was merely the young of this species, the "single caruncle not being developed in the younger bird" (see P. Z. S. 1866, p. 168\*). This view, especially seeing that the two supposed species had been obtained in the same locality, I was at that time quite disposed to coincide with; and it was adopted by Mr. Gould when he figured Casuarius uniappendiculatus in the 'Supplement to the Birds of Australia' (plates 74 and 75). Recently, however, I have convinced myself that it is, in all probability, incorrect.

Last summer we received in exchange from the Zoological Society of Amsterdam (as already recorded in these 'Proceedings,' 1871, p. 627) a Cassowary, not quite adult, which had been captured in 1869 near Munsinam+, on the north coast of New Guinea. Westerman had previously written to me about this bird, telling me that he considered it to belong to an undescribed species. Nevertheless, from the locality, I was at first inclined to believe that it might be possibly the young of Casuarius uniappendiculatus, although I knew that Mr. Westerman (who was well acquainted with the latter species from having had a fine living example of it long in his possession) was not of that opinion. After further examination and comparison, however, I quite convinced myself that it could not be C. uniappendiculatus, being so much smaller in size than that large species, and, though very nearly adult, showing no traces whatever of a gular caruncle. It then occurred to me that our bird might be C. kaupi of Rosenberg, and that Dr. Schlegel might have been in error in regarding this species as the young of C. uniappendiculatus. Our bird certainly agreed very fairly with Rosen-

\* Sec also Schlegel, in 'Ned, Tijdschr.' iii, p. 250.

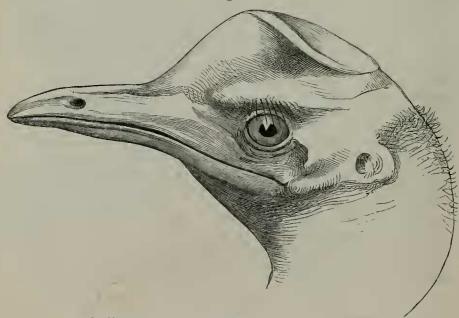
<sup>†</sup> This village is marked in the map in vol. i. of Mr. Wallace's 'Travels,' It is near Havre Dorey.





Outline of head of Casuarius kavpi, from east of original specimen.

Fig. 2.



Outline of head of Cassowary in the Society's Gardens.

berg's description; and Rosenberg had expressly insisted on his specimen being adult, and showing no signs of a throat-wattle. I therefore sent a coloured drawing of our bird to Dr. Kaup, and requested him to compare it with the original specimen of Casuarius kaupi in the Darmstadt Museum. Dr. Kaup kindly replied to me that the figure agrees well with the specimen, which, however, is by no means perfect, the head and neck being original, and the body being made up with the skin of the same bird, but the wings and legs being wanting, and having been replaced from other sources. Dr. Kaup added that his specimen was certainly not immature. Dr. Kaup also forwarded me a plaster cast of the head of the same specimen, which I now exhibit, and which, it will be observed, agrees in shape very well with the head of our living bird, although in the latter, not being so mature, the transvertical ridge is not quite so much developed.

Under these circumstances I came to the following conclusions:—
1. That a second species of Casuarius occurs in New Guinea more nearly allied to C. bennetti than to C. uniappendiculatus, the

only species previously known to inhabit that country.

2. That this second species should bear the name C. kaupi, that term having been erroneously considered synonymous with C. uni-

appendiculatus.

After having arrived thus far, I received the new part of 'Nederlandsch Tijdschrift voor de Dierkunde,' containing the fifth and concluding portion of Dr. Schlegel's "Observations Zoologiques." Here I discovered that the existence of this second Cassowary in New Guinea had been already noticed, H. v. Rosenberg having transmitted two specimens of it (obtained on the western coast of the Bay of Geelvink, nearly the same locality as that where the bird now in our Gardens was captured) to the Leyden Museum. Dr. Schlegel has referred these specimens to the Mooruk (Casuarius bennetti), observing, at the same time, that H. v. Rosenberg had considered them distinct, and had given them the name Casuarius papuensis.

Having at the present moment specimens of the true Casuarius bennetti and of the allied bird from New Guinea living side by side in the Gardens, we can have no difficulty in deciding that they belong to quite different species. Indeed Dr. Schlegel could hardly have fallen into the error of uniting them if he had had a specimen of C. bennetti for comparison. In C. bennetti the naked space on the throat is less extended, and the whole of the naked skin is of a uniform cobalt-blue all around. In C. kaupi the back of the neck is of a bright red, as are likewise the two lateral neck-stripes, and the sides and back of the head are of a bright iridescent silvery green. Nevertheless there can be no question that the two species are closely allied, being of nearly the same size, and having the casque of the same form.

In my opinion, therefore, the synonyms of the new Papuan Cas-

sowary should stand as follows:-

CASUARIUS KAUPI. (Plate IX.)

Casuarius kaupi, Rosenb. Journ. f. Orn. 1861, p. 44.

Casuarius bennetti, Schlegel, Ned. Tijdschr. iv. p. 54. "Casuarius papuensis, Rosenb. MS.;" Schlegel, l. s. c. Hab. Papua.

In conclusion, I take this opportunity of giving a revised list of the six species of Casuarius now known to us, with their localities. They may be divided into three sections, as follows:—

- a. Casside lateraliter compressa: appendicula cervicis duplici.
- 1. C. galeatus, ex Ceram.
- 2. C. bicarunculatus, ex ins. Aroensibus\*.
- 3. C. australis, ex Australia Bor. Or.
- b. Casside transversim expansa: appendicula cervicis unica.
- 4. C. uniappendiculatus, ex Papua.
  - c. Casside transversim expansa: appendicula cervicis nulla.
- 5. C. kaupi, ex Papua.
- 6. C. bennetti, ex Nov. Britann. et inss. Salomonist.
- 7. Descriptions of two imperfectly known Species of Cyprinoid Fishes from the Punjab, India. By Lieut. Regi-NALD BEAVAN, F.R.G.S., Revenue Survey Department of India.

[Received January 26, 1872.]

- 1. Labeo diplostomus, Heckel. (Fig. 1.)
- D. 3+10. A. 2+5. L. l. 43. L. transv. 10/12.

Mouth rather narrow. Lips with an inner fold in their entire circumference; lower lip fringed. Snout produced, convex, without lateral lobes. Two barbels only, very small, hidden in a lateral groove. Eye situated in advance of middle of head. There are six longitudinal series of scales between the lateral line and the ventral fin. Scales angular, becoming minute on the breast and throat. Dorsal fin concave, anterior rays being the longest. Caudal fin deeply forked, the small outer rays considerably overlapping the tail above and below. Depth of body rather more than one fourth of its length. Length of head one fifth of total length (without caudal). Coloration uniform.

Found at Rawul Pindee, Punjab. Length 6½ inches.

<sup>\*</sup> Cf. Schlegel, 'Nederl. Tijdschr.' iii. p. 347.
† The existence of a species of Casuarius in the Solomon Islands was first recorded by Capt. Hutton (Ibis, 1869, p. 352). On the 8th of October, 1869, this Society purchased of Messrs. Owen and Graham one of the birds spoken of by Capt. Hutton as formerly in the Gardens of the Auckland Acelimatization Society. It was Casuarius bennetti; it died September 8th, 1871.